OHIO DEPARTMENT OF NATURAL RESOURCES
DIVISION OF MINERAL RESOURCES MANAGEMENT

ATTACHMENT 20
(SEDIMENTATION POND/IMPOUNDMENT DATA SHEET)

Applicant's Name **The Ohio Valley Coal Company** Pond # **F**

Type of impoundment **Excavated Sediment Pond** Permanent ____, Temporary **X**

1. POND DRAINAGE AREA DATA:

a) Drainage area **3.88** acres
b) Disturbed area **1.29** acres
c) Ave. land slope **25.3** %
d) Hydrologic soil group **C**
e) Hydraulic length **250** ft.
f) Cover/condition of the undisturbed area **Woods/Vegetated = 2.59 Acres**

2. DESIGN STORM CRITERIA:
a) Method:

1) Design method(s) including computer programs: **Design Storm Discharge, Design Storm Hydrograph, Flood Routing Haestad Methods HEC-1**

2) SCS curve number **78**

b) Rainfall Amount/Peak Flow

	Rainfall, in.	Peak flow, cfs.
1) 10 year, 24 hour =	**3.78**	**9.61**
2) 25 year, 6 hour =		
3) 50 year, 6 hour = (if permanent)		
4) 100 year, 6 hour = (if 20/20 size)		

3. POND SIZE:
a) Dimensions:

1) Dam height **10** ft.
2) Dam width **30** ft.
3) Dam length **200** ft.
4) Dam downstream slope **50** %
5) Dam upstream slope **33** %
6) Core length __ft. __ft. __ft.

b) Sediment storage volume **1.14** ac. ft. is provided below the **1156** foot elevation.

c) Stage/Area Data:

	Elevation ft.	Surface Area ac.	Volume ac.ft.
1) Bottom of pond	**1150**	**0.06**	**0.00**
2) Streambed at upstream toe:	**N/A**	**N/A**	**N/A**
3) Principal spillway inlet:	**N/A**	**N/A**	**N/A**
4) Emergency spillway crest:	**N/A**	**N/A**	**N/A**
5) Top of embankment:	**1160**	**0.31**	**1.90**

D-0360-15

4. PRINCIPAL SPILLWAY: **N/A**

a) Pipe length _____ ft.
b) Pipe diameter _____ in.
c) Pipe slope _____ %
d) Riser diameter _____ in.
e) Riser height _____ ft.
f) Type of pipe _____
g) Number of anti-seep collars _____; spacing along pipe _____ ft.
h) Does the design include a trash rack? _____ Yes, _____ No.
i) Does the design include an anti-vortex device? _____ Yes, _____ No.

5. EMERGENCY SPILLWAY/EXIT CHANNEL: **N/A**

a) Base width _____ ft.
b) Design flow depth _____ ft.
c) Exit slope _____%
d) Exist velocity _____ fps
e) Channel lining _____
f) Side slopes _____
g) Freeboard _____ ft.
h) Entrance slope _____ %
i) Length of level control section _____ ft.

6. The minimum static factor of safety for this impoundment is **N/A**

7. Provide as an addendum to this attachment a detailed plan view or 2 cross sections of the impoundment.

9. 8. COMMENTS: **Water level to be controlled by pumping water from sediment pond back into slurry pool of the main embankment.**

9. Is this an MSHA structure? _____ Yes, **X** No. If "yes," provide the MSHA ID. number if one has been assigned _____.

10. If this is to be retained as a permanent impoundment, submit an addendum to this attachment demonstrating compliance with rule 1501:13-9-04(H)(2) of the Administrative Code.

11. I hereby certify that this impoundment is designed to comply with the applicable requirements of rule 1501:13-9-04 of the Administrative Code using current, prudent engineering practices.

Signature

March 15, 2006
Date

STATE OF OHIO
ERKAN
ESMER
E-69563
REGISTERED
PROFESSIONAL ENGINEER

P.E.

D-0360-1